FHIT
Recombinant Human FHIT/Fragile Histidine Triad Gene GST

Catalog No.	CRF126A	**Quantity:**	2 µg
	CRF126B		5 µg
	CRF126C		10 µg

Alternate Names: Bis(5'-adenosyl)-triphosphatase, EC 3.6.1.29, Diadenosine 5',5'''-P1,P3-triphosphate hydrolase, Dinucleosidetriphosphatase, AP3A hydrolase, AP3Aase, Fragile histidine triad protein, FHIT, FRA3B.

Description: FHIT is a member of the histidine triad gene family. FHIT gene encodes a diadenosine 5',5'''-P1,P3-triphosphate hydrolase involved in purine metabolism. FHIT gene includes the common fragile site FRA3B on chromosome 3, where carcinogen-induced damage can lead to translocations and abnormal transcripts of this gene. The FHIT protein is a tumor suppressor with reduced or no expression in numerous types of cancer. FHIT may also act as a tumor suppressor in normal cells. Alterations and deletions of the FHIT (Fragile Histidine Triad) gene are strongly linked to the genesis and establishment of human tumors of the lung, cervix, breast, colon, stomach, and pancreas. The expression of FHIT is more often lost in cancers of individuals with familial mutations causing deficiency in DNA repair genes such as BRCA1, BRCA2 and MSH2. In vitro FHIT functions as a hydrolase that cleaves diadenosine triphosphate (Ap3A) to ADP and AMP. . The FHIT -Ap3A enzyme-substrate complex seems to be the tumor suppressor signal. The restoration of FHIT expression in FHIT -deficient cancer cells leads to apoptosis, involving the intrinsic caspase pathway, in cancer-derived cells and in tumor xenografts.

GeneID: 2272

Source: FHIT Human Recombinant full length protein expressed in *E.coli*

Molecular Weight: 43 kDa band on SDS-PAGE.

Formulation: FHIT in 50 mM Tris-Acetate, pH7.5 + 1mM EDTA and 20% Glycerol.

Purity: FHIT Human Recombinant full length protein expressed in *E.coli,* shows a 43 kDa band on SDS-PAGE.
The FHIT is fused to GST-Tag and purified by proprietary chromatographic techniques.

Physical Apearance: Sterile Filtered clear solution.

Applications:
- ELISA
- Inhibition Assays
- Western Blotting.

Storage & Stability: Store vial at -20°C to -80°C. When stored at the recommended temperature, this protein is stable for 12 months.
Please prevent freeze-thaw cycles.

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

Cell Sciences®
480 Neponset Street
Bldg 12A
Canton, MA 02021

Toll Free: 888-769-1246
Phone: 781-828-0610
Fax: 781-828-0542

E-mail: info@cellsciences.com
Website: www.cellsciences.com